



**Department of
Environmental Protection
Bureau of Land & Water Quality April 2004
O&M Newsletter**

A monthly newsletter for wastewater discharge licensees, treatment facility operators, and associated persons

Compliance Review

The Department tracks compliance with license requirements through facility inspections and review of facility self-monitoring data.

Facilities are required to report the results of the monitoring required by the discharge permit to the Department on a monthly basis in Discharge Monitoring Reports (DMRs)

The Department utilizes a variety of tools to ensure compliance at licensed facilities including voluntary compliance, education and outreach, technical assistance, licensing, facility inspections, and enforcement actions.

For the purposes of this report all licensed wastewater dischargers have been designated with a compliance status either *Substantial Compliance*, *Significant Non Compliance* (SNC), or *Exceptions List* (EL) for the calendar year 2003. They are defined as follows:

Substantial Compliance: A facility in substantial compliance will have had no violations of its wastewater license, or violations that did not exceed SNC or EL criteria.

Significant Non Compliance: A facility in SNC will have had two large violations, or four of any

size violations, for a given parameter in a six-month period. A large violation is a *conventional pollutant* violation that exceeds its permit limit by 40% or more, or a toxic pollutant violation that exceeds its permit limit by 20% or more. Conventional pollutants are pollutants typical of municipal sewage, and for which secondary treatment plants are designed to treat. They are Biochemical Oxygen Demand, Total Suspended Solids, fecal coliform bacteria, oil and grease and pH. Toxic pollutants are pollutants that may cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, or physical deformations. Toxic pollutants include certain metals and organic chemicals.

Exceptions List: A facility is placed on the EL if a facility in SNC has another large violation for the same parameter in the quarter after they reach SNC.

SNC and EL are compliance status criteria developed by the United States Environmental Protection Agency and utilized by the Department to track compliance. For the purposes of this summary, the Department has chosen to include all permit limits as potential SNC and EL criteria. EPA uses a more abbreviated list.

Compliance Status All Dischargers 2003

Compliance Status	Number of Facilities	Percent of Facilities
SNC	21	6%
Exceptions List	22	6%
Substantial Compliance	328	88%

Compliance Status POTWs 2003

Compliance Status	Number of Facilities	Percent of Facilities
SNC	12	7%
Exceptions List	10	6%
Substantial Compliance	147	87%

Compliance Status Non POTWs 2003

Compliance Status	Number of Facilities	Percent of Facilities
SNC	9	4%
Exceptions List	12	6%
Substantial Compliance	181	90%

It should be noted that the Clean Water Act is unique among environmental laws in the amount of data that must be collected and reported by the licensed dischargers. Every licensed discharger is required to monitor for a variety of parameters. The amount of parameters varies from approximately 30 for large dischargers to approximately 10 for small dischargers. The parameters are monitored at varying frequencies from daily to annually based on a variety of factors. All this data is submitted to the Department on a monthly basis. The result is

that, just for the 82 major facilities, in any given month there are approximately 16,600 opportunities for an exceedence to be measured.

To illustrate this, the following table indicates the number of violations for Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) (two common parameters) as a percentage of possible violations per year. This table is based on data from the largest 116 municipal and the largest 16 industrial wastewater treatment facilities.

Summary of Discharge Violations				
Year	BOD		TSS	
	Number of Violations	% of Possible Violations	Number of Violations	% of Possible Violations
FY 98-99	504	2.92%	193	1.12%
FY 99-00	516	3.00%	279	1.62%
FY 00-01	226	1.32%	243	1.41%
FY 01-02	315	1.81%	117	0.67%
FY 02-03	125	0.72%	111	0.64%

These tables demonstrate that the facility operators in Maine are working to improve their facility effluent quality. I encourage all of our operators to reduce the number of violations (in particular SNC and EL) and also to go beyond compliance by optimizing facility performance.

Certification News

If we didn't hear from you by March 1, 2004, your certification became inactive you received a letter stating that your certification is inactive.

If you signed up for the Spring wastewater operator certification exam, you should have received a confirmation letter telling you the location and time of the exam. If you did not receive a letter, contact us ASAP.

Criminal Falsification

On March 11, 2004, a representative of a wastewater treatment facility licensed by the DEP pled guilty in Hancock Superior Court to 8 counts of false reporting on monthly Discharge Monitoring Reports (DMRs), as part of a plea agreement with the State. Based on the agreement, the judge sentenced the defendant to a 30-day suspended jail sentence, with 6 months probation, conditioned on 120 hours of community service, and ordered him to pay a \$10,000 fine. The case was prosecuted by Assistant Attorney General Carol Blasi.

The legal basis for prosecution of an individual for falsification and tampering is found in Title 38, Section 349. This section states that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained by the DEP, or who tampers with or renders inaccurate any monitoring devices or method required by any provision of law or any order, rule, license, permit, approval or decision, is upon conviction, subject to a fine of not more than \$10,000, or by imprisonment for not more than 6 months, or both.

The defendant in this case had wastewater samples collected and sent to a contract laboratory for analysis. When the reports were returned to the facility with violations of license limits, the defendant reported results within license limits. As all of you who submit DMRs to the Department should remember, there is a certification statement adjacent to the signature box. This certification places legal responsibility on the person signing the DMR to make sure that all of the information is correct and warns that anyone submitting false information is subject to significant penalties, including the possibility of fine and imprisonment.

The criminal behavior addressed in this case goes to the very foundation of our waste discharge program. We rely on those who monitor and report under our program to be honest and objective in their sampling and reporting. This case highlights the importance we place on honest reporting and shows the State's resolve to see that those who report falsely are prosecuted.

Phil Garwood

For Practice

1. The best definition of the word "communication" is:
 - a. Talking to others and making your point.
 - b. Writing memos and reports.
 - c. Transferring information to and from others.
 - d. Making sure other people know what you are thinking.
2. How much water is in an 8-inch line 1200 feet long?
 - a. 1175 gallons
 - b. 2654 gallons
 - c. 1539 gallons
 - d. 3143 gallons
3. A sample with a pH of 4.5 is
 - a. Alkaline
 - b. Neutral
 - c. Acidic
 - d. Basic
4. To improve settling in a clarifier, you should
 - a. Decrease the hydraulic detention time in the clarifier
 - b. Increase flow to the clarifier
 - c. Use mixers to suspend the sludge
 - d. Make sure there is a uniform low velocity across the clarifier

Standard Conditions

This is the third in a series of articles that will run for the entire year and will ultimately cover all of the “STANDARD CONDITIONS” found in all permits. As you will notice, these articles are not listed as they appear in the “STANDARD CONDITIONS”. Rather they are grouped by related or similar subject matter. The standard conditions that apply to you are those that were in effect when your waste discharge license was issued. They were included with your waste discharge license. The version of “STANDARD CONDITIONS” that is the subject of this series is a revision issued on July 1, 2002. It is essential that you read and understand this document. It may seem like pretty dull, “boilerplate” stuff, but complying with the standard conditions is important to assuring that your treatment facility is in full compliance with its permit and all applicable laws and statutes. This most recent revision of “STANDARD CONDITIONS” can be found on line at:

[http:// www.state.me.us/dep/blwq/docstand/wastepage.htm#gen](http://www.state.me.us/dep/blwq/docstand/wastepage.htm#gen)

A. GENERAL PROVISIONS

12. Inspection and entry. *The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:*

- (a) Enter upon the permittee’s premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;*

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;*
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,*
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.*

Each facility has a compliance inspector assigned to conduct periodic inspections. On occasion DEP staff, including staff from the Licensing or Enforcement Sections may visit your facility, announced or unannounced, to interview treatment facility staff, view/inspect the facility, review/copy records, and/or collect samples. DEP staff are all issued an identification badge which they should make available if requested.

4. Duty to provide information. *The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.*

The DEP considers proper record keeping to be one of the permittee’s most important obligations. It is essential that you retain

records for at least three years or as required in your permit and provide them to the DEP upon request. These records may include, but are not limited to; production records, laboratory bench sheets, operational or pump station inspection logs, outside laboratory reports and 49 forms. Such records should be kept available so that when DEP staff are on-site, you are able to promptly furnish them upon request. In addition, if DEP staff are not on-site and request information, you must provide copies of the information within a reasonable time. Failure to furnish required records upon request and failure to provide requested information within a reasonable time are violations of your permit and may be included in any enforcement action.

B. OPERATION AND MAINTENANCE OF FACILITIES

- 3. Need to halt or reduce activity not a defense.** *It shall not be a defense for a permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.*

If a wastewater treatment facility is experiencing compliance problems, the operator should look for all possible means to end or reduce violations. One option, especially for industrial processes, is to reduce or eliminate the volume of wastewater being generated and discharged. In the event that the DEP takes an enforcement action, the permittee cannot use as a defense, that the only way to maintain compliance would have been to reduce or cease the discharge. If reduction or cessation of the discharge is necessary to maintain compliance, the permittee should do so if technically possible.

- 4. Duty to mitigate.** *The permittee shall take all reasonable steps to minimize or*

prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

In the event that your facility is in violation of any permit condition, you need to take all reasonable actions to minimize or correct the problem. This is in consideration of both the amount of improperly treated wastewater and the duration of an event. For example, if a pump station is bypassing untreated wastewater due to a pump breakdown, you are required to take all reasonable steps to minimize the amount of wastewater being bypassed. Such steps may include hiring a septage hauler to pump out the wastewater while the pump is being repaired/replaced.

As always, if you have any questions or concerns regarding your license or any other water compliance issues, contact your facility Inspector. He or she will be able to work with you, or direct you to the appropriate Departmental resources.

All water quality laws and regulations can be accessed at:

<http://www.maine.gov/dep/enviro/lrrr.htm>

John Glowa
Enforcement Section
Division of Water Resource Regulation

Approved Training

April 7, 2004 in Brewer, ME - Electric Motors: The Fundamentals, Applications & Troubleshooting - Sponsored by Northeast Water & Wastewater Training Associates and Life Safety Specialists (207)-934-4802 or (207)-744-0135 – Approved for 46 hours

April 7, 2004 in Presque Isle, ME -
Workplace Safety Series #1 - Sponsored by
Northeast Water & Wastewater Training
Associates and Life Safety Specialists (207)-
934-4802 or (207)-744-0135 – Approved for
4 hours

April 14, 2004 in Waterville, ME - Basic
Wastewater Math - Sponsored by Northeast
Water & Wastewater Training Associates
and Life Safety Specialists (207)-934-4802
or (207)-744-0135 – Approved for 5 hours

April 14, 2004 in Easton, ME - Solids
Management, Utility Management &
Disinfection Protection - Sponsored by
MRWA – 729-6569 – Approved for 5 hours

April 27, 2004 in Vassalboro, ME -
Workplace Safety Series #1 - Sponsored by
Northeast Water & Wastewater Training
Associates and Life Safety Specialists (207)-
934-4802 or (207)-744-0135 – Approved for
4 hours

April 27, 2004 in Bangor, ME – LockOut/
TagOut, Low Voltage Electrical Safety &
Fall Protection - Sponsored by MRWA –
729-6569 – Approved for 5.5 hours

April 28, 2004 in Norway, ME - Concepts of
Biological Treatment - Sponsored by
Northeast Water & Wastewater Training
Associates and Life Safety Specialists (207)-
934-4802 or (207)-744-0135 – Approved for
5 hours

April 28, 2004 in Houlton, ME – LockOut/
TagOut, Low Voltage Electrical Safety &
Fall Protection - Sponsored by MRWA –
729-6569 – Approved for 5.5 hours

April 29, 2004 in York, ME - Line Location
& leak Detection - Sponsored by Northeast
Water & Wastewater Training Associates
and Life Safety Specialists (207)-934-4802
or (207)-744-0135 – Approved for 4 hours

May 4&5, 2004 in Augusta, ME - Activated
Sludge - Sponsored by Northeast Water &
Wastewater Training Associates and Life
Safety Specialists (207)-934-4802 or (207)-
744-0135 – Approved for 9 hours

May 4, 2004 in York, ME - Fall Protection -
Sponsored by Northeast Water &
Wastewater Training Associates and Life
Safety Specialists (207)-934-4802 or (207)-
744-0135 – Approved for 4 hours

May 4, 2004 in Gardiner, ME – LockOut/
TagOut, Low Voltage Electrical Safety &
Fall Protection - Sponsored by MRWA –
729-6569 – Approved for 5.5 hours

May 5, 2004 in York, ME – LockOut/
TagOut, Low Voltage Electrical Safety &
Fall Protection - Sponsored by MRWA –
729-6569 – Approved for 5.5 hours

May 6, 2004 in Norway, ME – LockOut/
TagOut, Low Voltage Electrical Safety &
Fall Protection - Sponsored by MRWA –
729-6569 – Approved for 5.5 hours

May 6, 2004 in Waterville, ME - Applied
Wastewater Math - Sponsored by Northeast
Water & Wastewater Training Associates
and Life Safety Specialists (207)-934-4802
or (207)-744-0135 – Approved for 5 hours

May 10, 2004 in Hallowell, ME - Operation,
Troubleshooting, & Upgrade of Municipal
and Industrial Lagoons *with Dr. Michael
Richard* - Sponsored by JETCC, (207) 253-
8020 – Approved for 6 hours.

May 11, 2004 in Hallowell, ME -
Identification of Filamentous Organisms in
Activated sludge

with Dr. Michael Richard - Sponsored by
JETCC, (207) 253-8020 – Approved for 6
hours.

May 20, 2004 in Livermore Falls, ME - Residuals Management & Storage Options with Proven Beneficial Uses for Biosolids (*followed by a round of golf*) - Sponsored by JETCC, (207) 253-8020 – Approved for 6 hours.

May 25, 2004 in Togus, ME - Fall Protection - Sponsored by Northeast Water & Wastewater Training Associates and Life Safety Specialists (207)-934-4802 or (207)-744-0135 – Approved for 4 hours

Answers to For Practice:

1. c. Communication is the transfer of information both to you and from you. True communications works both ways.
2. d. The volume of the pipe is $0.785 \times (\text{diameter in feet})^2 \times \text{length in feet} \times 7.5 \text{ gallons/cubic foot}$
 $0.785 \times 0.667^2 \times 0.5 \times 1200 \times 7.5 = 3,143 \text{ gallons.}$
3. c. Neutral pH is 7.0. Any liquid having a pH less than 7.0 is acidic. Any liquid having a pH greater than 7.0 is alkaline or basic.
4. d Clarifiers depend on slow, uniform flow to allow the solid particles to settle out of the water before the water leaves the clarifier. Decreasing the detention time, which is usually done by increasing flow, will allow less time for settling. Stirring the clarifier with mixers will resuspend the solids.

Training Credit

We have just completed the two-year renewal cycle for operators who have even certificate numbers. This year, as in all of the past years, we have received certificates from operators for training that they hope will be approved “after the fact”. While there are many good training courses offered that we are more than willing to approve for credit, there are some criteria that we must uphold if we are to maintain the credibility of the training requirement.

1. If you sign up for training that you are not sure will be approved; you should contact us for a review. Usually we can tell you, based on the course content and the person/organization giving the training, if the training will be approved.
2. If you receive a certificate from a trainer/organization that does not specifically state the number or hours or C.E.U.s awarded, we cannot accept the certificate without some independent verification of the training hours. All certificates submitted for approval must have the training hours/C.E.U.s printed on them.
3. If you are doing in-house training, it is best to check ahead of time and get approval from us. It would be sad if you held three days of in-house training and your operators assumed that they were all set for their next renewal period and then we disapproved the training in February.

As with many other things, the best advice is to check ahead and make sure the training you’re signing up for, whether as an outside class or training you’re bringing in to your facility, will be approved for you and your operators.



Wastewater Laboratory Quality Assurance/Quality Control



Tuesday, June 1, 2004

Jeff's Catering
Brewer, Maine

Wednesday, June 2, 2004

Presque Isle Inn & Convention Center
Presque Isle, Maine

Thursday, June 10, 2004
Cohen Community Center
Hallowell, Maine

Friday, June 11, 2004
Holiday Inn Express
Saco, Maine

Registration 8:00 - 8:30

Course Hours 8:30 - 4:00

Program Cost \$30

Lunch is sponsored by Katahdin Analytical Services

Whether you oversee your own sampling and analytical laboratory procedures or rely upon a contracted laboratory, your licensed wastewater treatment facility is responsible for the accuracy, validity and completeness of all data and other information submitted to Maine Department of Environmental Protection. The Department then relies upon your data to assess environmental conditions and to make regulatory decisions.

In April 2003, the Maine DEP announced new *Performance Standards* for all laboratory activities performed by licensed wastewater treatment facilities, and also for the laboratories with which they are contracted. The purpose of these standards is to assure the quality and defensibility of the environmental data as reported.

Still, many facilities facing these standards are challenged with:

- ✍ Where to begin?
- ✍ Exactly what is Quality Assurance/Quality Control?
- ✍ How to determine Sample Collection and Handling procedures
- ✍ How to set up a written QA/QC plan
- ✍ How to establish Standard Operating Procedures
- ✍ Which standard protocols to adopt, and which to customize by facility or process

On behalf of Maine DEP and JETCC, **Katahdin Analytical Services** will present four training sessions to help Maine's facilities meet these standards. **These sessions will offer step by step tools to aid operators of both large and small facilities in developing QA/QC plans and establishing SOPs.**

Through participation in this training, you will benefit from detailed explanations, with procedural demonstrations of wastewater chemistries.

You will also receive:

- ✍ A model QA/QC plan to customize for your facility
- ✍ Sample bench sheets
- ✍ QC checklists
- ✍ The recently updated Laboratory SOP Manual from Maine Wastewater Control Association

***Funds to subsidize the training were donated to JETCC from Domtar Industries of Baileyville, Maine. These funds were provided through a consent agreement between Domtar Industries and the State of Maine.*

CREDITS: 6 Training Contact Hours

For More Information, contact JETCC at (207) 253-8020 or by Email at JETCC@maine.rr.com